



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Tomohiro Kawase et al. Art Unit : 1765  
Serial No. : 09/824,965 Examiner : Robert Kunemund  
Filed : April 3, 2001  
Title : METHOD OF PREPARING GROUP III-V COMPOUND SEMICONDUCTOR CRYSTAL

**MAIL STOP AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

This reissue application recently has been returned to the Examiner from the Board of Patent Appeals and Interferences. Junior party Liu (AXT) Corporation abandoned the Interference Proceeding on December 14, 2004, pursuant to a confidential settlement which led to an agreement, award of priority to the present reissue applications. (Attachments 1 and 2).

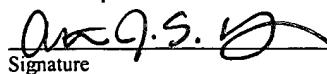
Shortly before conceding the interference, Liu filed two motions for judgment, containing allegations (1) that the present reissue application lacks a written description to support certain claims (Attachment 3) and (2) that certain claims are unpatentable over prior art (Attachment 4). Those motions were not considered by the Board, because Liu conceded priority. Copies of each of these motions are submitted herewith so that the examination of the present application can be completed.

**CERTIFICATE OF MAILING BY FIRST CLASS MAIL**

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

February 4, 2005

Date of Deposit

  
Signature

Autumn J.S. Hwang

Typed or Printed Name of Person Signing Certificate

Applicant notes that (1) the present Examiner considered the support for all of the claims in the present application before the interference was declared and (2) that the motion asserting unpatentability over prior art is—in essence—AXT’s fourth prior art based protest against the present application, which in itself suggests the unobviousness of the claimed invention.

Applicants also note that prior art has been cited by an opposer to Applicants’ counterpart European Patent No. 0803593. Details of the opposition can be found on the EPO website.

The U.S. and non-US patent references cited in the U.S. interference motion and the European are listed in the accompanying form PTO/SB/08A and copies of foreign patent references are being submitted herewith. Non-patent publications cited in those proceedings are listed in the accompanying form PTO/SB/08B and copies are being submitted herewith. The submissions of these references for the Examiner’s review and the record are not admissions by the Applicants that any of these references are prior art to the invention of U.S. Application No. 09/824,965.

In addition to Liu’s prior art based motion, Liu filed a 514 page claim chart, in an apparent attempt to circumvent the Patent Law Judge’s ruling limiting the number of pages for the motion. Applicants’ attorneys consider the duty of disclosure is fully satisfied by providing the prior art. In an abundance of caution and to assist the Examiner, Applicants also have provided herewith copies of Liu’s motions, although the duty does not require its filing. Liu’s 514 page claim chart is available in the file of Interference No. 105,237 or a copy will be sent to the Examiner by the Applicants’ undersigned attorneys upon request.

Please apply any charges or credits to Deposit Account No. 06-1050.

Applicant : Tomohiro Kawase et al.  
Serial No. : 09/824,965  
Filed : April 3, 2001  
Page : 3 of 3

Attorney's Docket No.: 12967-002001 / 997047-06  
(TM/it)

Respectfully submitted,

Date: February 4, 2005

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

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of 1

**Complete if Known**

Application Number	09/824,965
Filing Date	April 3, 2001
First Named Inventor	Kawase et al.
Art Unit	1765
Examiner Name	Robert Kunemund

Attorney Docket Number 12967-002001

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> ( <i>if known</i> )			
	US-	5041186	08-20-1991	Nishio, et al.	
	US-	5400742	03-28-1995	Nishio, et al.	
	US-	5471945	12-05-1995	Nishio, et al.	
	US-	5387544	02-07-1995	Hayafuji	
	US-	4478675	10-23-1984	Akai	
	US-	5186784	02-16-1993	Rau et al.	
	US-	5259916	11-09-1993	Rau et al.	
	US-	5415125	05-16-1995	Fujita et al.	
	US-	4083748	04-11-1978	Gault	
	US-	4404172	09-13-1983	Gault	
	US-	4521272	06-04-1985	Gault	
	US-	5342475	08-30-1994	Yoshida et al.	
	US-	4946544	08-07-1990	Ejim	
	US-	5256381	10-26-1993	Tada et al.	
	US-	5145550	09-08-1992	Tada et al.	
	US-	4923561	05-08-1990	Chemans et al.	
	US-	4678534	07-07-1987	Tada et al.	
	US-				
	US-				

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> ( <i>if known</i> )				
AA	64-37833		02-08-1989	Yamamoto et al.		✓
AB	59-054699		03-29-1984	Kokubu et al.		

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		Application Number	09/824,965
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		First Named Inventor	Kawase et al
		Art Unit	1765
		Examiner Name	Robert Kunemund
Sheet	1	of	1
		Attorney Docket Number	12967-002001

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AC	Frank, Ch., et al., "Description of Facet Growth During BGF Growth," Cryst. Res. Technol., 29 (1994)1, pp. K12-16	
	AD	Frank C., et al., "Growth of Semiinsulating GaAs Crystals by Vertical Gradient Freez Technique," Cryst. Res. Technol., 30 (1995) 7, pp. 897-909.	
	AE	Bourret, E.D., et al., "Effects of Total Liquid Encapsulation on the Characteristics of GaAs Single Crystals Grown...," J. Cryst. Gr. 11 (1991), pp. 395-404.	
	AF	Hein, K., et al. "Die Kristallisation aus Schmelzen als metallurgischer ProzeB," Metall, 47, Jahrgang, Heft 10, October 1993.	
	AG	Flade, et al. "Entwicklung groBflachiger GaAs-Substrate," Freiberger, June 20, 1995.	
	AH	Marshall et al., "A novel technique to reduce the concentration of Carbon in LEC gallium arsenide," J. Crys. Growth, 110 (1991), pp. 960-962.	
	D4	Dissertation of Christian Frank, 1995, Technische Universitat-Bergakademie Freiberg (D4A Catalogue Data re Publication Year) (Partial Translation)	✓
	D5	Diploma paper Matthias Muller, Sept. 15, 1993, Universitat Erlangen-Nurnberg (D5A Letter re Publication Date) (Partial Translation)	✓

Examiner Signature	Date Considered

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